

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

Claims 1-16 have been previously cancelled.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-16 (canceled)

Claim 17 (currently amended): A scanning microscope comprising:
 an excitation light beam configured to optically excite a first area of a specimen;
 a stimulation light beam configured to trigger a stimulated emission or an additional excitation
in a second area of the specimen, the second area at least partially overlapping with the first area of
the specimen;
 an objective configured to focus the excitation light beam and the stimulation light beam;
 an optical component configured to influence a shape of a focus of at least one of the
excitation light beam and the stimulation light beam; and
 an optical system configured to image the optical component into a pupil of the objective and
to adjust a size of an image of the optical component while maintaining the image of the optical
component in the pupil of the objective.

Claim 18 (previously presented): The scanning microscope as recited in claim 17 wherein the
optical system includes a movable focusing device.

Claim 19 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical
component is movably disposed.

Claim 20 (previously presented): The scanning microscope as recited in claim 17 further comprising a motor configured to move at least one of the optical system and the optical component.

Claim 21 (previously presented): The scanning microscope as recited in claim 17 the optical system includes a varifocal optical system.

Claim 22 (previously presented): The scanning microscope as recited in claim 21 further comprising a motor configured to adjust the varifocal optical system.

Claim 23 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical system is replaceable.

Claim 24 (withdrawn): The scanning microscope as recited in claim 23 further comprising a supply device configured to store a second optical system having a different optical property than the optical system.

Claim 25 (withdrawn): The scanning microscope as recited in claim 24 wherein the supply device includes at least one of a turret and a sliding carriage.

Claim 26 (withdrawn): The scanning microscope as recited in claim 24 further comprising a motor configured to drive the supply device.

Claim 27 (withdrawn): The scanning microscope as recited in claim 25 further comprising a motor configured to drive the supply device.

Claim 28 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical system is configured to automatically adjust the size of the image of the optical component.

Claim 29 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical system is configured to adjust the size of the image of the optical component as a function of a diameter of the pupil of the objective.

Claim 30 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical component includes a phase-retarding plate.

Claim 31 (withdrawn): The scanning microscope as recited in claim 30 wherein the phase-retarding plate includes a $\lambda/2$ plate.

Claim 32 (withdrawn): The scanning microscope as recited in claim 30 wherein the phase-retarding plate is configured to achieve locally differing phase retardations in different areas.

Claim 33 (withdrawn): The scanning microscope as recited in claim 17 wherein the optical component is configured to act exclusively on the stimulation light beam.

Claim 34 (previously presented): The scanning microscope as recited in claim 17 wherein the scanning microscope is at least one of a confocal scanning microscope and a double confocal scanning microscope.